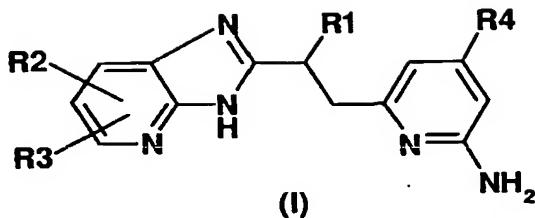


Patent claims

1. Compounds of formula I



in which

R1 is hydrogen or 1-4C-alkyl,

R2 is hydrogen, halogen, hydroxyl, nitro, amino, 1-7C-alkyl, trifluoromethyl, 3-7C-cycloalkyl-1-4C-alkyl, 1-4C-alkoxy, completely or predominantly fluorine-substituted 1-4C-alkoxy, 1-4C-alkoxy-1-4C-alkyl, 1-4C-alkoxy-1-4C-alkoxy, 1-4C-alkoxycarbonyl, mono- or di-1-4C-alkylaminocarbonyl, mono- or di-1-4C-alkylaminosulfonyl, 1-4C-alkylcarbonylamino, 1-4C-alkylsulfonylamino, phenyl, R21- and/or R211-substituted phenyl, phenyl-1-4C-alkyl, phenyl-1-4C-alkyl wherein the phenyl moiety is substituted by R22, phenyl-1-4C-alkoxy, pyridyl, pyridyl substituted by R23, pyridyl-1-4C-alkyl, pyridyl-1-4C-alkyl wherein the pyridyl moiety is substituted by R24, in which

R21 is cyano, halogen, carboxyl, 1-4C-alkyl, 1-4C-alkoxy, aminocarbonyl, mono- or di-1-4C-alkylaminocarbonyl, 1-4C-alkylcarbonylamino, 1-4C-alkoxycarbonyl, aminosulfonyl, mono- or di-1-4C-alkylaminosulfonyl, amino, mono- or di-1-4C-alkylamino, trifluoromethyl, hydroxyl, phenylsulfonylamino, phenyl-1-4C-alkoxy, or -S(O)₂-Het, in which

Het is bonded to the adjacent sulfonyl group via a ring nitrogen atom, and is a 3- to 7-membered fully saturated heterocyclic ring comprising one nitrogen atom, to which the sulfonyl group is attached, and optionally one further heteroatom selected from N(R210), oxygen and sulfur, in which

R210 is 1-4C-alkyl,

R211 is halogen or 1-4C-alkoxy,

R22 is halogen, 1-4C-alkyl or 1-4C-alkoxy,

R23 is halogen, 1-4C-alkyl or 1-4C-alkoxy,

R24 is halogen, 1-4C-alkyl or 1-4C-alkoxy,

R3 is hydrogen, halogen, 1-4C-alkyl or 1-4C-alkoxy,

R4 is 1-4C-alkyl, or 1-4C-alkoxy,

and the salts, the N-oxides and the salts of the N-oxides of these compounds.

2. Compounds of formula I as claimed in claim 1 in which

R1 is hydrogen or 1-2C-alkyl,

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R2 is hydrogen, halogen, phenyl, or R21- and/or R211-substituted phenyl, in which
R21 is 1-4C-alkyl, cyano, halogen, mono- or di-1-4C-alkylamino, trifluoromethyl, mono- or di-1-4C-alkylaminosulfonyl, hydroxyl, phenyl-1-4C-alkoxy, or -S(O)₂Het, in which
Het is azetidin-1-yl, pyrrolidin-1-yl, piperidin-1-yl, or 4N-(R210)-piperazin-1-yl, in which
R210 is 1-4C-alkyl,
R211 is halogen,
R3 is hydrogen,
R4 is methyl, or methoxy,
and the salts, the N-oxides and the salts of the N-oxides of these compounds.

3. Compounds of formula I as claimed in claim 1 in which

R1 is hydrogen, methyl or ethyl,
R2 is hydrogen, iodine, bromine, phenyl, or R21- and/or R211-substituted phenyl, in which
R21 is methyl, cyano, chlorine, fluorine, dimethylamino, trifluoromethyl, dimethylaminosulfonyl, hydroxyl, benzyloxy, or -S(O)₂Het, in which
Het is azetidin-1-yl, pyrrolidin-1-yl, piperidin-1-yl, or 4N-methyl-piperazin-1-yl, in which
R211 is chlorine,
R3 is hydrogen,
R4 is methyl, or methoxy,

and the salts, the N-oxides and the salts of the N-oxides of these compounds.

4. Compounds of formula I as claimed in claim 1 in which

R1 is hydrogen or methyl,
R2 is bonded in the 6-position of the 3H-imidazo[4,5-b]pyridine ring, and is hydrogen, iodine, bromine, phenyl, 3-hydroxyl-phenyl, 4-(R21)-phenyl, or 3,5-di-chloro-phenyl, in which
R21 is methyl, cyano, chlorine, fluorine, dimethylamino, trifluoromethyl, dimethylaminosulfonyl, benzyloxy, or -S(O)₂Het, in which
Het is azetidin-1-yl, pyrrolidin-1-yl, piperidin-1-yl, or 4N-methyl-piperazin-1-yl, in which
R3 is hydrogen,
R4 is methyl, or methoxy,

and the salts, the N-oxides and the salts of the N-oxides of these compounds.

5. Compounds of formula I as claimed in claim 1 in which

R1 is hydrogen or 1-4C-alkyl,
R2 is hydrogen, halogen, hydroxyl, nitro, amino, 1-7C-alkyl, trifluoromethyl, 3-7C-cycloalkyl, 3-7C-cycloalkyl-1-4C-alkyl, 1-4C-alkoxy, completely or predominantly fluorine-substituted 1-4C-alkoxy, 1-4C-alkoxy-1-4C-alkyl, 1-4C-alkoxy-1-4C-alkoxy, 1-4C-alkoxycarbonyl, mono- or di-1-4C-alkylaminocarbonyl, mono- or di-1-4C-alkylaminosulfonyl, 1-4C-alkylcarbonylamino, 1-4C-

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alkylsulfonylamino, phenyl, R21- and/or R211-substituted phenyl, phenyl-1-4C-alkyl, phenyl-1-4C-alkyl wherein the phenyl moiety is substituted by R22, phenyl-1-4C-alkoxy, pyridyl, pyridyl substituted by R23, pyridyl-1-4C-alkyl, pyridyl-1-4C-alkyl wherein the pyridyl moiety is substituted by R24, in which

R21 is cyano, halogen, carboxyl, 1-4C-alkyl, 1-4C-alkoxy, aminocarbonyl, mono- or di-1-4C-alkylaminocarbonyl, 1-4C-alkylcarbonylamino, 1-4C-alkoxycarbonyl, aminosulfonyl, mono- or di-1-4C-alkylaminosulfonyl, amino, mono- or di-1-4C-alkylamino, trifluoromethyl, hydroxyl, phenylsulfonylamino or phenyl-1-4C-alkoxy,

R211 is halogen or 1-4C-alkoxy,

R22 is halogen, 1-4C-alkyl or 1-4C-alkoxy,

R23 is halogen, 1-4C-alkyl or 1-4C-alkoxy,

R24 is halogen, 1-4C-alkyl or 1-4C-alkoxy,

R3 is hydrogen, halogen, 1-4C-alkyl or 1-4C-alkoxy,

R4 is 1-4C-alkyl,

and the salts, the N-oxides and the salts of the N-oxides of these compounds.

6. Compounds of formula I as claimed in claim 1 in which

R1 is hydrogen, methyl or ethyl,

R2 is hydrogen, iodine, bromine, phenyl, or R21-substituted phenyl, in which

R21 is methyl, cyano, chlorine, fluorine, dimethylamino or trifluoromethyl,

R3 is hydrogen,

R4 is methyl,

and the salts, the N-oxides and the salts of the N-oxides of these compounds.

7. Compounds of formula I as claimed in claim 1 in which

R1 is hydrogen or methyl,

R2 is R21-substituted phenyl, in which

R21 is aminosulphonyl, mono- or di-1-4C-alkylaminosulfonyl, or -S(O)₂-Het, in which

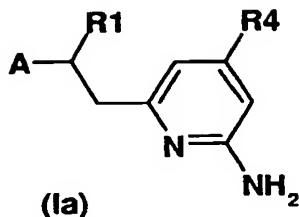
Het is azetidin-1-yl, pyrrolidin-1-yl, piperidin-1-yl, or 4N-(1-4C-alkyl)-piperazin-1-yl,

R3 is hydrogen,

R4 is methyl, or methoxy,

and the salts, the N-oxides and the salts of the N-oxides of these compounds.

8. Compounds of formula I as claimed in claim 1 which are from formula Ia



in which

R1 is hydrogen,

R4 is methyl or methoxy, and

A is 6-(4-dimethylaminosulphonyl-phenyl)-3H-imidazo[4,5-b]pyridin-2-yl, 6-(4-diethylaminosulphonyl-phenyl)-3H-imidazo[4,5-b]pyridin-2-yl, 6-(4-methylaminosulphonyl-phenyl)-3H-imidazo[4,5-b]pyridin-2-yl, 6-(4-aminosulphonyl-phenyl)-3H-imidazo[4,5-b]pyridin-2-yl, 6-(4-ethylaminosulphonyl-phenyl)-3H-imidazo[4,5-b]pyridin-2-yl, 6-[4-(azetidine-1-sulfonyl)-phenyl]-3H-imidazo[4,5-b]pyridin-2-yl, 6-[4-(pyrrolidine-1-sulfonyl)-phenyl]-3H-imidazo[4,5-b]pyridin-2-yl, 6-[4-(piperidine-1-sulfonyl)-phenyl]-3H-imidazo[4,5-b]pyridin-2-yl, or 6-[4-(4-methyl-piperazine-1-sulfonyl)-phenyl]-3H-imidazo[4,5-b]pyridin-2-yl,

and the salts, the N-oxides and the salts of the N-oxides of these compounds.

9.

Compounds of formula I according to any of the preceding claims comprising one or more of the following:

R1 is hydrogen,

R2 is bonded to the 6-position of the 3H-imidazo[4,5-b]pyridine ring,

R3 is hydrogen, and

R4 is methyl;

and the salts, the N-oxides and the salts of the N-oxides of these compounds.

10. A compound according to claim 1 which is selected from the group consisting of:

1. 2-[2-(2-Amino-4-methylpyridin-6-yl)ethyl]-3H-imidazo[4,5-b]pyridine
2. (R,S)-2-[3-(2-Amino-4-methylpyridin-6-yl)prop-2-yl]-3H-imidazo[4,5-b]pyridine
3. (R,S)-2-[4-(2-Amino-4-methylpyridin-6-yl)but-2-yl]-3H-imidazo[4,5-b]pyridine
4. 2-[2-(2-Amino-4-methylpyridin-6-yl)ethyl]-6-bromo-3H-imidazo[4,5-b]pyridine
5. 2-[2-(2-Amino-4-methylpyridin-6-yl)ethyl]-6-phenyl-3H-imidazo[4,5-b]pyridine
6. 2-[2-(2-Amino-4-methylpyridin-6-yl)ethyl]-6-(4-cyano-phenyl)-3H-imidazo[4,5-b]pyridine
7. 2-[2-(2-Amino-4-methylpyridin-6-yl)ethyl]-6-p-tolyl-3H-imidazo[4,5-b]pyridine
8. 2-[2-(2-Amino-4-methylpyridin-6-yl)ethyl]-6-(4-fluoro-phenyl)-3H-imidazo[4,5-b]pyridine
9. 2-[2-(2-Amino-4-methylpyridin-6-yl)ethyl]-6-(4-dimethylamino-phenyl)-3H-imidazo[4,5-b]pyridine
10. 2-[2-(2-Amino-4-methylpyridin-6-yl)ethyl]-6-(4-chloro-phenyl)-3H-imidazo[4,5-b]pyridine
11. 2-[2-(2-Amino-4-methylpyridin-6-yl)ethyl]-6-(4-iodo-phenyl)-3H-imidazo[4,5-b]pyridine

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12. 2-[2-(2-Amino-4-methylpyridin-6-yl)ethyl]-6-(4-trifluoromethyl-phenyl)-3H-imidazo[4,5-b]pyridine
13. 6-[2-(3-Benzyl-phenyl)-3H-imidazo[4,5-b]pyridin-2-yl]-ethyl]-4-methyl-pyridin-2-ylamine
14. 6-[2-[6-(3,5-Dichloro-phenyl)-3H-imidazo[4,5-b]pyridin-2-yl]-ethyl]-4-methyl-pyridin-2-ylamine
15. 6-[2-[6-(4-Benzyl-phenyl)-3H-imidazo[4,5-b]pyridin-2-yl]-ethyl]-4-methyl-pyridin-2-ylamine
16. 3-[2-[2-(6-Amino-4-methyl-pyridin-2-yl)-ethyl]-3H-imidazo[4,5-b]pyridin-6-yl]-phenol
17. 6-(2-[6-[4-(Azetidine-1-sulfonyl)-phenyl]-3H-imidazo[4,5-b]pyridin-2-yl]-ethyl)-4-methyl-pyridin-2-ylamine
18. 4-Methyl-6-(2-[6-[4-(pyrrolidine-1-sulfonyl)-phenyl]-3H-imidazo[4,5-b]pyridin-2-yl]-ethyl)-pyridin-2-ylamine
19. 4-Methyl-6-(2-[6-[4-(piperidine-1-sulfonyl)-phenyl]-3H-imidazo[4,5-b]pyridin-2-yl]-ethyl)-pyridin-2-ylamine
20. 4-[2-[2-(6-Amino-4-methyl-pyridin-2-yl)-ethyl]-3H-imidazo[4,5-b]pyridin-6-yl]-N,N-dimethyl-benzenesulfonamide
21. 4-Methyl-6-(2-[6-[4-(4-methyl-piperazine-1-sulfonyl)-phenyl]-3H-imidazo[4,5-b]pyridin-2-yl]-ethyl)-pyridin-2-ylamine, and
22. 2-[2-(2-Amino-4-methoxypyridin-6-yl)ethyl]-3H-imidazo[4,5-b]pyridine;
or a salt, N-oxide or a salt of a N-oxide thereof.

11. Pharmaceutical compositions containing one or more compounds of formula I according to claim 1 together with the usual pharmaceutical auxiliaries and/or excipients.

12. Use of compounds of formula I according to claim 1 for the production of pharmaceutical compositions for the treatment of acute inflammatory diseases.

13. Use of compounds of formula I according to claim 1 for the production of pharmaceutical compositions for the treatment of chronic inflammatory diseases of peripheral organs and the CNS.

14. A method for treating acute inflammatory diseases in a patient comprising administering to said patient a therapeutically effective amount of a compound of formula I according to claim 1.

15. A method for treating chronic inflammatory diseases of peripheral organs and the CNS in a patient comprising administering to said patient a therapeutically effective amount of a compound of formula I according to claim 1.